

## Product datasheet for **MG218785**

### **Nlrp5 (NM\_001039143) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nlrp5 (NM_001039143) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nlrp5
Synonyms:	Mat; Mater; N; Nalp5; O; Op1; PAN11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218785 representing NM_001039143 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGTCCTCCAGAAAAAGAAAGTAAAGCAATCTTGAAAGCACGTGGATTGGAAGAGGAACAGAAGTCAG  
AAAGAAAAATGACTTCTCCAGAAAACGACAGTAAATCAATCCAGAAAGACCAAGGACCAGAGCAGGAGCA  
GACATCAGAAAGCACAATGGGTCTCCAGAAAAAGACAGTAAAGCAATCTTGAAAGCACGTGGATTGGA  
GAGGAACAGAAGTCAGAAAGCACAATGTCTCCTCAGAAAATGTCAGTAGAGCAATCCTGAAAGACAGTG  
GATCAGAAAGAAGTGAACAGGCGTCAGAAAGAAAAATGACTTCTCCAGAAAACGACAGTAAATCAATCCA  
GAAAGACCAAGGACCAGAGCAGGAGCAGACATCAGATAATGGAGGTGACTTACAAGACTACAAGGCCAT  
GTGATTGCTAAGTTCGACACAAGTGTGGATCTACACTATGACAGCCCAGAGATGAAATTATTGTCTGATG  
CTTTTAAACCATAACCAGAAAACCTTCCAGCCTCACACCATTATCTACATGGAAGACCAGGAGTTGGGAA  
GTCAGCTTTGGCCAGAAGTATTGTTCTTGGCTGGGCACAGGTAAGTCTTCCAAAAATGTCTTTGTC  
ATCTTCTCTCTGTTAGAGAAATAAAGTGGACAGAGAAGAGCAGTTTGGCACAGCTGATTGCTAAGGAGT  
GTCCAGACTCCTGGGATCTAGTGACAAAGATCATGTCCCAACCAGAAAGACTCTTGTTTGTATAGATGG  
CTTGGATGATATGGACTCTGTCTCCAACATGATGATATGACACTATCCAGAGACTGGAAGGATGAACAG  
CCATATACATCCTGATGTACAGCCTCCTGAGGAAGGCTCCTACCTCAGTCTTCTCATCATTACCA  
CCAGAAAACAGGCTTAGAAAACTCAAGTCAATGGTTGTGTCCCCCTCTATATACTGGTTGAAGGACT  
GTCTGCATCAAGGAGATCTCAGCTGGTCTCGAGAACATCTCCAATGAGTCTGATAGAATACAAGTCTTC  
CATTCTCTGATAGAAAATCACCAGCTGTTTGACCAATGCCAGGCCCTCTGTGTCTCCCTGGTCTGTG  
AGGCTCTACAGCTACAGAAGAACTGGGAAAGAGATGCACCCTACCCTGCCAGACTCTCACCAGTTTGTG  
TGCCACGTTGGTGTTCACCAGCTCACCTTGAAGGCTTCCCAGAGCGCTCTCAGTCAGGAAGAACAG  
ATTACTCTAGTGGGTTTGTGATGATGGCAGCTGAAGGAGTGTGGACCATGAGGTCGGTGTCTATGATG  
ATGACCTGAAGAACTATAGCCTAAAGGAGTCTGAGATCTTGGCCCTTTTCACATGAACATCCTTCTCCA  
GGTTGGCCACAACAGTGAGCAGTGTATGTTTTCTCCACCTCAGCCTGCAGATTCTTTGCTGCCTTA



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TATTATGTTTTAGAAGGGCTGGAGGAATGGAATCAGCATTTTTGCTTCATTGAAAACCAAAGGAGCATCA  
 TGGAGGTGAAGAGAACTGACGACTCGCCTCCTCGGGATGAAGCGTTTCTTATTTGGCCTCATGAACAA  
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 CACTGGGTCTCTGATAGCTCAGCAGGTCAATGGCACCAGCCCAATGGACACCTGGATGCCTTCTATT  
 GTCTATTTGAGTCTCAGGATGAAGAGTTTGTGGCGGGCTCTCAAACGTTCCAAGAAGTGTGGCTGCT  
 GATTAACCCAGAAGATGGACTTGAAGTCTCTTCTACTGTCTCAAGCACTGTGAGAACTGAAGGCAATC  
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 AGACACAATGTAAGCCCCCTCTCATGGAGTGGTGGGAAACTCTGCTCTGTGCTTGGCAGCCTCCGGAA  
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 AACACCAAGCACTTAAAAAGTTGGATCTTGGTAAACACGCCCTGGGTGACAAAGGAGTCATAACCCTG  
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 TGACTTCAAGTACATCGGGGATGTTGAAGCTGTGCTCTGCGTTCCAATGCCCTGTCTTAACCTGGGGATA  
 ATTGGCCTGTGGAAGCAGGAGTACTATGCCGAGTGAGAAGACAGCTGGAGGAAGTTGAGTTTGTCAAGC  
 CCCACGTGGTGATTGATGGTGATTGGTATGCTAGTGATGAAGATGACCGAAACTGGTGGAAAAAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG218785 representing NM\_001039143  
 Red=Cloning site Green=Tags(s)

MGPPEKESKAILKARGLEEEQKSERKMTSPENDSKSIQKQDQPEQEQTSESTMGPPEKDSKAILKARGLE  
 EEQKSESTMSPENVSRAILKDSGSEVEQASERKMTSPENDSKSIQKQDQPEQEQTSDNGGDLQDYKAH  
 VIAKFDTSVDLHYDSPMKLLSADFQPYKTFQPHTIILHGRPGVGSALARSIVLGWAQKLFQKMSFV  
 IFFSVREIKWTEKSSLAQLIAKECPDSWDLVTKIMSQPERLLFVIDGLDDMDSVLQHDDMTLSRDWKDEQ  
 PIYILMYSLLRKALLPQSFLIITRNTGLEKLSMVVSPLYILVEGLSASRRSQLVLENISNESDRIQVF  
 HSLIENHQLFDQCQAPSVC SLVCEALQLQKKGKRCTLPCQTLTGLYATLVFHQLTLKRPSQSALSQEEQ  
 ITLVGLCMMAAEGVWTRSVFYDDDLKNYSLKESEILALFHMNILLQVGHNSEQCYVFSHLSLQDFFAAL  
 YVLEGLEEWNQHFCEIENQRSIMEVKRTDDTRLLGMKRFLFGLMKNKDILKLEVLFEYPIPTVEQKQLQ  
 HWVSLIAQVNGTSPMDTLDAFYCLFESQDEEFVGGALKRFQEVWLLINQKMDLVSSYCLKHCQNKLKAI  
 RVDIRDLLSVDNTELECPVTVQETQCKPLMEWNGNFC SVLGSRLNKLKELDLGDSILSQRAMKILCLEL  
 RNQSCRIQKLFKSAEVVSGLKHLWLLFSNQLKYLNLGNTPMKDDDMKLACEALKHPCSVETLRDLS  
 CELTIIGYEMISTLLISTTRCLKLSLAKNRVGVKSMISLGNALSSMCLLQKILDNCGLTPASCHLLVS  
 ALFSNQLTHLCLSNNSLGTGEGVQLCQFLRNPECALQRLILNHCNIVDDAYGFLAMRLANNTKLTHLSL  
 TMNPVGDGAMKLLCEALKEPTCYLQELVDCQLTQNCCEDLACMITTTKHLKSLDLGNNALGDKGVITL  
 CEGLKQSSSSLRRLGLGACKLTSNCEALSLAISCNPHLNSLNLVKNDFSTSGMLKLCSAFQCPVSNLGI  
 IGLWKQEYARVRRQLEEEVFVKPHVVIDGDWYASDEDDRNWWKN

TRTRPLE – GFP Tag – V

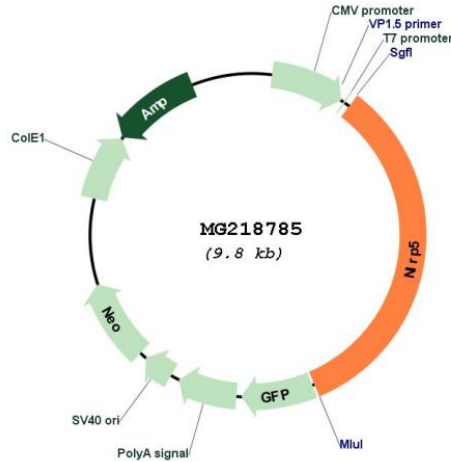
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001039143

ORF Size: 3285 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<u>NM_001039143.2, NP_001034232.1</u>
<b>RefSeq Size:</b>	3463 bp
<b>RefSeq ORF:</b>	3288 bp
<b>Locus ID:</b>	23968
<b>UniProt ID:</b>	<u>Q9R1M5</u>
<b>Cytogenetics:</b>	7 10.22 cM
<b>Gene Summary:</b>	This gene encodes a member of the NACHT, leucine-rich repeat, and pyrin domain containing family. Members of this family have a pyrin domain at the N-terminus, a central NACHT domain, and a C-terminal leucine-rich repeat domain. This gene encodes a maternal-effect factor that is essential for early embryonic development in the mouse. Homozygous null mutant females are sterile, and embryos die following the first cleavage. This gene is required for endoplasmic reticulum redistribution and calcium homeostasis in oocytes. In addition, ovulated oocytes mutant for this gene have abnormal mitochondrial localization and increased mitochondrial activity, which results in mitochondrial damage and early embryonic lethality. Pseudogenes of this gene have been found on chromosomes 7 and 12. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]